

REMARKS/ARGUMENTS

Claims 1-48 stand rejected in the outstanding Official Action. Claims 1, 13, 25 and 37 have been amended and therefore claims 1-48 remain in this application.

The Examiner's entry and consideration of Applicants' previously submitted Information Disclosure Statements is very much appreciated.

Claims 25-48 stand rejected under 35 USC §101, with the claims allegedly directed to non-statutory subject matter. The Examiner suggests that claims directed to computer program products including a computer program are somehow non-statutory subject matter. Applicants respectfully traverse this Patent Office position because such computer programs clearly fall within the ambit of "new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof" as set out in 35 USC §101.

However, Applicants have amended independent claims 25 and 37 to positively recite the computer program product comprises a computer-readable storage medium which includes the computer program. This language has been widely accepted by the Patent Office as reciting a computer readable storage medium which the Patent Office takes as statutory subject matter. It is also noted that this language is set forth in U.S. Patent 6,836,860 which has obviously been approved by the U.S. PTO. Therefore, entry of the above amendments to claims 25 and 37 is believed to obviate any further rejection of claims 25-48 under 35 USC §101.

Claims 1-5, 7, 9-11, 13-17, 19, 21-23, 25-29, 31, 33-35, 37-41, 43 and 45-47 stand rejected under 35 USC §102 as being anticipated by Ishizaki (U.S. Patent 6,484,314). The Court of Appeals for the Federal Circuit has noted in the case of *Lindemann Maschinenfabrik GMBH v. American Hoist & Derrick*, 221 USPQ 481, 485 (Fed. Cir. 1984) that "[a]nticipation requires the

presence in a single prior art reference disclosure of each and every element of the claimed invention, arranged as in the claim."

Applicants have amended independent claims 1, 13, 25 and 37 to confirm that the instruction decoder, in response to a compare and branch instruction, comprises a decoder for accomplishing four separate functions (numbered (i) through (iv)). Thus, each of the independent claims now specifies an apparatus (claim 1), a method (claim 13) and two computer program products (claims 25 and 37) which all require structure (ii) or method step (ii) for "copying, in dependence upon a result of said comparison, a program counter value to a third register." This feature is recited in each of the independent claims and requires a compare and branch instruction that causes a decoder to automatically record the address of the instruction step by copying a program counter value to a third register in dependence upon the result of the comparison in the previous step.

It should be clearly understood that Ishizaki clearly teaches away from this claimed feature in each of Applicants' independent method claims because at column 5, lines 50-65, in Ishizaki, when a condition described in the tw/twi (compare and branch) instruction is established, a branch is performed to the exception handler. The type of exception is established in the Ishizaki system by examining the instruction corresponding to the address at which the exception occurred. Thus, Ishizaki clearly teaches that the instruction that gave rise to the exception is decoded to determine the cause of the exception.

Applicants' specification discloses the problem of providing greater flexibility in the range of target branch addresses that can be specified within a compare and branch instruction. This is discussed in detail in Applicants' originally filed specification at page 3, lines 2-7. The

present invention addresses this problem by providing a compare and branch instruction that automatically copies a program counter value to a register in dependence upon the result of a comparison. In effect, this means that the operation is analogous to a conditional-branch-with-link because it is capable of returning and continuing. This consequence is particularly useful in embodiments where the compare and branch instruction as in the present invention is used for exception handling. The step of copying and storing the value of the program counter means that it is ready in a register and provides an indication of the source of the exception.

Additionally, the compare and branch instruction of the present invention determines the target branch address from both a pre-programmed stored value and the program counter value (note independent claims 1, 13, 25 and 37, item (iii) requires determining "a target branch address from a pre-programmed stored value and said program counter value"). The fact that the target branch address is calculated from these two values eliminates the requirement in Ishizaki that one decode the instruction to determine the cause of, for example, an exception.

Thus, in view of the above discussion and claim amendments, each of Applicants' independent claims requires structure and method steps reflecting items (ii) and (iii) which are simply not disclosed anywhere in the Ishizaki reference. The absence of either one of these claimed features eliminates the Ishizaki reference as supporting any rejection under 35 USC §102, but the absence of both of these features confirms the inappropriateness of the anticipation rejection. Any further rejection of claims 1-5, 7, 9-11, 13-17, 19, 21-23, 25-29, 31, 33-35, 37-41, 43 and 45-47 under 35 USC §102 as anticipated by Ishizaki is respectfully traversed.

Claims 6, 18, 30 and 42 stand rejected under 35 USC 103 as unpatentable over Ishizaki in view of Assembly Programming ("The Art of Assembly Programming"). Inasmuch as claims 6,

18, 30 and 42 ultimately depend from independent claims 1, 13, 25 and 37, the above comments distinguishing the independent claims from the Ishizaki reference are herein incorporated by reference.

Ishizaki still fails to teach at least two elements or method steps recited in each of the independent claims. There is no allegation in section 21 on page 7 of the Official Action suggesting that the Assembly Programming reference contains any disclosure of these missing elements in the independent claims. Instead, the Examiner suggests that Assembly Programming merely teaches details of the more limited claims 6, 18, 30 and 42. Thus, without any allegation that Assembly Programming teaches the elements or method steps missing from the Ishizaki reference, even if the two references were combined, they would still be deficient in terms of disclosing the required structures and method steps of the claims.

Additionally, the Examiner has failed to properly indicate how or why one of ordinary skill in the art would be "motivated" to combine the references. Moreover, the Ishizaki reference actually teaches away from the two features of Applicants' claim because his branch is performed to the exception handler. Ishizaki teaches that the instruction that gave rise to the exception is decoded to determine the cause of the exception, which is the opposite to that which is disclosed and claimed in the present application. Thus, Ishizaki teaches away from Applicants' claimed invention and claims 6, 18, 30 and 42 cannot be obvious in view of the combination of Ishizaki and Assembly Programming because the combination would not be obvious to one of ordinary skill in the art.

Claims 8, 20, 32 and 44 stand rejected under 35 USC 103 as unpatentable over Ishizaki in view of Schmidt (U.S. Patent 6,484,314). Inasmuch as claims 8, 20, 32 and 44 ultimately

depend from independent claims 1, 13, 25 and 37, the above comments distinguishing the independent claims from the Ishizaki reference are herein incorporated by reference.

Ishizaki still fails to teach the two elements or method steps recited in each of the independent claims. There is no allegation in section 22 of the Official Action suggesting that the Schmidt reference contains any disclosure of these missing elements in the independent claims. Instead, the Examiner suggests that Schmidt merely teaches details of the more limited claims 8, 20, 32 and 44. Thus, without any allegation that Schmidt teaches the elements or method steps missing from the Ishizaki reference, even if the two references were combined, they would still be deficient in terms of disclosing the required structures and method steps of the claims.

Additionally, the Examiner has failed to properly indicate how or why one of ordinary skill in the art would be "motivated" to combine the references. Moreover, as noted above, the Ishizaki reference actually teaches away from the two features of Applicants' claim because his branch is performed to the exception handler. Ishizaki teaches that the instruction that gave rise to the exception is decoded to determine the cause of the exception, which is the opposite to that which is disclosed and claimed in the present application. Thus, Ishizaki teaches away from Applicants' claimed invention and claims 8, 20, 32 and 44 cannot be obvious in view of the combination of Ishizaki and Assembly Programming because the combination would not be obvious to one of ordinary skill in the art.

Claims 12, 24, 36 and 48 stand rejected under 35 USC 103 as unpatentable over Ishizaki in view of Wikipedia (Wikipedia term "Protected Mode"). Inasmuch as claims 12, 24, 36 and 48 ultimately depend from independent claims 1, 13, 25 and 37, the above comments distinguishing

the independent claims from the Ishizaki reference are herein incorporated by reference. Thus, Ishizaki fails to teach at least two elements or method steps recited in each of the independent claims. There is no allegation in section 23 of the Official Action suggesting that the Wikipedia reference contains any disclosure of these missing elements in the independent claims. Instead, the Examiner suggests that Wikipedia merely teaches details of the more limited claims 12, 24, 36 and 48 . Thus, without any allegation that Wikipedia teaches the elements or method steps missing from the Ishizaki reference, even if the two references were combined, they would still be deficient in terms of disclosing the required structures and method steps of the claims.

Additionally, the Examiner has failed to properly indicate how or why one of ordinary skill in the art would be "motivated" to combine the references. Moreover, as noted above, the Ishizaki reference actually teaches away from the two features of Applicants' claim because his branch is performed to the exception handler. Ishizaki teaches that the instruction that gave rise to the exception is decoded to determine the cause of the exception, which is the opposite to that which is disclosed and claimed in the present application. Thus, Ishizaki teaches away from Applicants' claimed invention and claims 12, 24, 36 and 48 cannot be obvious in view of the combination of Ishizaki and Assembly Programming because the combination would not be obvious to one of ordinary skill in the art.

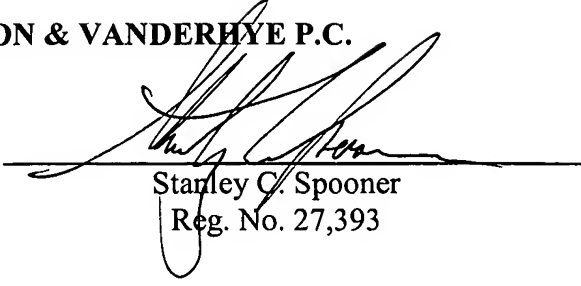
Having responded to all objections and rejections set forth in the outstanding Official Action, it is submitted that claims 1-48 are in condition for allowance and notice to that effect is respectfully solicited. In the event the Examiner is of the opinion that a brief telephone or personal interview will facilitate allowance of one or more of the above claims, she is respectfully requested to contact Applicants' undersigned representative.

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Respectfully submitted,

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